## <u>CLAIMS</u>

## What is claimed:

A method for geofencing mobile transmissions,
 comprising:

determining a geographic location of a mobile transmitter;

determining a geographic interference contour of said mobile transmitter that is operating over a specific frequency at said geographic location;

determining a neighboring service contour that is associated with an FCC license to operate over a specific channel that includes said specific frequency;

determining if said geographic interference contour and said neighboring service contour overlap; and

controlling transmissions from said mobile transmitter in order to comply with FCC regulations.

2. The method of Claim 1, wherein said determining a neighboring service contour comprises:

accessing a database comprising geographic locations of said neighboring service contour.

3. The method of Claim 1, wherein said controlling transmissions further comprises:

controlling transmit power of transmissions from said mobile transmitter to avoid interference with service provided under said FCC license in a geographic area defined by said neighboring service contour.

- 4. The method of Claim 3, wherein said service comprises transmission of paging signals.
- 5. The method of Claim 3, wherein said service comprises customer receipt of the transmission of paging signals.
- 6. The method of Claim 1, wherein said controlling transmissions further comprises:

disabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour overlap; and

enabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour do not overlap.

7. The method of Claim 1, wherein said controlling transmissions further comprises:

altering parameters affecting said transmissions.

.8. The method of Claim 1, wherein said controlling transmissions further comprises:

limiting transmissions from said mobile transmitter to specific periods of time that do not interfere with transmissions of signals associated with service provided under said FCC license in an area defined by said neighboring service contour.

- 9. The method of Claim 1, wherein a service provider controlling said mobile transmitter and a holder of said FCC license are the same entity.
- 10. A method for geofencing mobile transmissions, comprising:

determining a geographic location of a mobile transmitter;

determining a geographic interference contour of said mobile transmitter that is operating over a specific frequency at said geographic location;

determining a neighboring service contour that is associated with an FCC license to operate over a specific channel that includes said specific frequency;

determining if said geographic interference contour and said neighboring service contour overlap; and

disabling transmissions from said mobile transmitter when said geographic interference contour and said neighboring service contour overlap.

- 11. The method of Claim 10, further comprising:
  enabling transmissions from said mobile transmitter when
  said geographic interference contour and said neighboring
  service contour do not overlap.
- 12. The method of Claim 10, wherein said mobile transmitter comprises a mobile pager transmitter.
- 13. The method of Claim 10, wherein said determining an adjoining service contour comprises:

accessing a database comprising geographic locations of said neighboring service contour.

- 14. The method of Claim 10, wherein said neighboring service contour defines a service area.
- 15. The method of Claim 10, wherein said service contour defines a basic economic area (BEA).

16. A method for geofencing mobile transmissions, comprising:

determining a geographic location of a mobile transmitter that is transmitting over a specific frequency;

accessing a database of prohibited locations for transmission due to possible interference with a neighboring geographic area that is associated with an FCC license to operate over a specific channel that includes said specific frequency;

determining if said geographic location is included within said database of prohibited locations; and

disabling transmissions from said mobile transmitter when said geographic location is included within said database of prohibited locations.

- 17. The method of Claim 16, further comprising:
  enabling transmissions from said mobile transmitter when
  said geographic location is not included within said database
  of prohibited locations.
- 18. The method of Claim 16, further comprising:

  controlling transmit power of transmissions from said

  mobile transmitter to avoid interference with service

  provided under said FCC license in said neighboring

  geographic area.

- 19. The method of Claim 18, further comprising:
  limiting transmissions from said mobile transmitter to
  specific periods of time that do not interfere with
  transmissions of signals associated with service provided
  under said FCC license in an area defined by said neighboring
  service contour.
- 20. The method of Claim 16, wherein said FCC license provides for a paging service.
- 21. The method of Claim 16, wherein said mobile transmitter provides for one-way paging transmissions.
- 22. A method for geofencing mobile transmissions, comprising:

determining a geographic location of a mobile transmitter that is transmitting over a specific frequency;

accessing a database of allowable locations for transmissions from said mobile transmitter that do not interfere with a neighboring geographic area that is associated with an FCC license to operate over a specific channel that includes said specific frequency;

determining if said geographic location is included within said database of prohibited locations; and TRMB1395/JPW/LCH 50

enabling transmissions from said mobile transmitter when said geographic location is included within said database of prohibited locations.

- 23. The method of Claim 22, further comprising:
  disabling transmissions from said mobile transmitter
  when said geographic location is not included within said
  database of allowable locations.
- 24. A computer system comprising a processor and a computer readable memory coupled to said processor and comprising program instructions that, when executed, implement a method for geofencing mobile transmissions comprising:

determining a geographic location of a mobile transmitter;

determining a geographic interference contour of said mobile transmitter that is operating over a specific frequency at said geographic location;

determining a neighboring service contour that is associated with an FCC license to operate over a specific channel that includes said specific frequency;

determining if said geographic interference contour and said neighboring service contour overlap; and

controlling transmissions from said mobile transmitter in order to comply with FCC regulations.

25. The computer system of Claim 24, wherein said determining an adjoining service contour in said method comprises:

accessing a database comprising geographic locations of said neighboring service contour.

26. The computer system of Claim 24, wherein said controlling transmissions in said method further comprises:

controlling transmit power of transmissions from said mobile transmitter to avoid interference with service provided under said FCC license in a geographic area defined by said neighboring service contour.

- 27. The computer system of Claim 26, wherein said service comprises transmission of paging signals.
- 28. The computer system of Claim 26, wherein said service comprises customer receipt of the transmission of paging signals.
- 29. The computer system of Claim 24, wherein said controlling transmissions in said method further comprises:

  TRMB1395/JPW/LCH 52

disabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour overlap; and

enabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour do not overlap.

- 30. The computer system of Claim 24, wherein said controlling transmissions in said method further comprises: altering parameters affecting said transmissions.
- 31. The computer system of Claim 24, wherein said controlling transmissions in said method further comprises:

limiting transmissions from said mobile transmitter to specific periods of time that do not interfere with transmissions of signals associated with service provided under said FCC license in an area defined by said neighboring service contour.

- 32. The computer system of Claim 24, wherein a service provider controlling said mobile transmitter and a holder of said FCC license are the same entity.
- 33. A method for geofencing mobile transmissions, comprising:

determining a geographic location of a mobile transmitter;

determining a geographic interference contour of said mobile transmitter that is operating over a specific frequency at said geographic location;

determining a neighboring service contour;

determining if said geographic interference contour and said neighboring service contour overlap; and

controlling transmissions from said mobile transmitter to avoid an overlap of said geographic interference contour and said neighboring service contour.

- 34. The method of Claim 33, wherein said neighboring service contour is associated with an FCC license to operate over a specific channel that includes said specific frequency.
- 35. The method of Claim 34, wherein said controlling transmissions is performed in order to comply with FCC regulations.
- 36. The method of Claim 33, wherein said determining a neighboring service contour comprises:

accessing a database comprising geographic locations of said neighboring service contour.

37. The method of Claim 33, wherein said controlling transmissions further comprises:

controlling transmit power of transmissions from said mobile transmitter to avoid interference with service provided in a geographic area defined by said neighboring service contour.

- 38. The method of Claim 37, wherein said service comprises transmission of paging signals.
- 39. The method of Claim 37, wherein said service comprises customer receipt of the transmission of paging signals.
- 40. The method of Claim 33, wherein said controlling transmissions further comprises:

disabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour overlap; and

enabling transmissions from said mobile transmitter when said geographic interference area and said neighboring service contour do not overlap.

41. The method of Claim 33, wherein said controlling transmissions further comprises:

altering parameters affecting said transmissions.

42. The method of Claim 33, wherein said controlling transmissions further comprises:

limiting transmissions from said mobile transmitter to specific periods of time that do not interfere with transmissions of signals associated with service provided under said FCC license in an area defined by said neighboring service contour.